WHAT IS CLAIMED IS:

1.   A computer-readable medium having thereon computer-executable instructions for performing a method comprising maintaining, local to a peer participating in at least one communication connection, a local connection translation table, the local connection translation table comprising:

at least one original connection parameter of the at least one communication connection; and

at least one current connection parameter of the at least one communication connection.

2.   The computer-readable medium of claim 1, wherein the local connection translation table further comprises at least one original connection parameter and at least one current connection parameter for each active communication connection.

3.   The computer-readable medium of claim 2, wherein:
each active communication connection comprises at least one data stream, and each data stream comprises at least one connection parameter of the communication connection; and
the method further comprises:

for each communication connection having an outbound data stream, translating the at least one connection parameter of the outbound data stream to the corresponding at least one current connection parameter of the local connection translation table; and

for each communication connection having an inbound data stream, translating the at least one connection parameter of the inbound data stream to the corresponding at least one

original connection parameter of the local connection
translation table.

4.   The computer-readable medium of claim 3, wherein:

each data stream comprises at least one Internet protocol
(IP) datagram;

the at least one current connection parameter comprises a
current local IP address; and

translating the at least one connection parameter of the
outbound data stream to the corresponding at least one current
connection parameter of the local connection translation table
comprises replacing the source address of each outbound IP
datagram with the current local IP address.

5.   The computer-readable medium of claim 4, wherein:

the at least one current connection parameter further
comprises a current remote IP address; and

translating the at least one connection parameter of the
outbound data stream to the corresponding at least one current
connection parameter of the local connection translation table
further comprises:

replacing the destination address of each outbound IP
datagram with the corresponding current remote IP address.

6.   The computer-readable medium of claim 1, wherein the
local connection translation table further comprises an original
connection specification and a current connection specification
for each active communication connection, and each connection
specification comprises:

a local network attachment point identifier; and

a remote network attachment point identifier.

7.   The computer-readable medium of claim 6, wherein each network attachment point identifier comprises:

an Internet protocol (IP) address; and

a transmission control protocol (TCP) port.

8.   The computer-readable medium of claim 6, wherein each network attachment point identifier comprises:

an Internet protocol (IP) address; and

a user datagram protocol (UDP) port.

9.   The computer-readable medium of claim 6, wherein maintaining the local connection translation table comprises: as a result of a local network attachment point change, for each entry in the local connection translation table, updating the local network attachment point identifier of the current connection specification of the local connection translation table entry.

10.   The computer-readable medium of claim 6, wherein the method further comprises receiving a Connection Update message, the Connection Update message comprising:

an original connection identifier; and

a new network attachment point identifier.

11.   The computer-readable medium of claim 10, wherein maintaining the local connection translation table comprises: as a result of receiving the Connection Update message, updating the remote network attachment point identifier of the current connection specification of the local connection translation

table entry identified by the original connection identifier of the Connection Update message.

12   A computer-readable medium having thereon computer-executable instructions for performing a method comprising sending, as a result of a local peer changing its network attachment point from a first network attachment point to a second network attachment point, a Connection Update message to each remote peer participating in a communication connection with the local peer, the Connection Update message comprising:

a communication connection identifier; and

an identifier of the second network attachment point.

13.   The computer-readable medium of claim 12, wherein the Connection Update message further comprises a cryptographic signature authenticating the identity of the local peer

14.   The computer-readable medium of claim 12, wherein the method further comprises publishing the local network attachment point change event to a virtual connectivity subscribe-notify service.

15.   The computer-readable medium of claim 14, wherein publishing the local network attachment point change event to a virtual connectivity subscribe-notify service comprises sending a publish message from the local peer to the virtual connectivity subscribe-notify service, the publish message comprising:

an identifier of the first network attachment point; and

the identifier of the second network attachment point.

16. The computer-readable medium of claim 12, wherein the Connection Update message is sent between peers by being incorporated into a lower layer network protocol.

17. The computer-readable medium of claim 16, wherein:

the lower layer network protocol is the Internet protocol (IP); and

the Connection Update message is incorporated into the Internet protocol as at least one IP option.

18. The computer-readable medium of claim 16, wherein:

the lower layer network protocol is the transmission control protocol (TCP); and

the Connection Update message is incorporated into the transmission control protocol as at least one TCP option.

19. The computer-readable medium of claim 16, wherein:

the lower layer network protocol is the user datagram protocol (UDP); and

the Connection Update message is incorporated into the user datagram protocol by, at least, appending the Connection Update message data to a UDP datagram, the Connection Update message data formatted as for TCP options.

20. A computerized system comprising a local connection translation component configured to, at least, maintain a local connection translation table, the local connection translation table comprising a local connection translation table entry for each active communication connection between a communication peer local to the local connection translation component and a communication peer remote to the local connection translation

component, each local connection translation table entry
comprising:

an original connection specification; and

a current connection specification.

21. The computerized system of claim 20, wherein each
connection specification comprises:

an identifier of the network attachment point of the
communication peer local to the local connection translation
component; and

an identifier of the network attachment point of the
communication peer remote to the local connection translation
component.

22. The computerized system of claim 20, wherein the local
connection translation component is further configured to, at
least:

intercept each network protocol unit outbound from the
communication peer local to the local connection translation
component;

determine the local connection translation table entry
associated with the outbound protocol unit; and

replace at least one data field value in the outbound
protocol unit that corresponds to at least one parameter of the
original connection specification of the local connection
translation table entry associated with the outbound protocol
unit with at least one value from the corresponding at least one
parameter of the current connection specification of the local
connection translation table entry associated with the outbound
protocol unit.

23.   The computerized system of claim 20, wherein the local connection translation component is further configured to, at least:

intercept each network protocol unit inbound to the communication peer local to the local connection translation component;

determine the local connection translation table entry associated with the inbound protocol unit; and

replace at least one data field value in the inbound protocol unit that corresponds to at least one parameter of the current connection specification of the local connection translation table entry associated with the inbound protocol unit with at least one value from the corresponding at least one parameter of the original connection specification of the local connection translation table entry associated with the inbound protocol unit.

24.   The computerized system of claim 20, further comprising a connection management component configured to, at least, receive a Connection Update message, the Connection Update message comprising:

an identifier corresponding to the original connection specification of a local connection translation table entry; and

an identifier of a new network attachment point of the communication peer remote to the local connection translation component.